

Title (en)

Ferrite material with little loss and low sintering temperature, manufacturing method and magnetic compound comprising said ferrite material

Title (de)

Ferritmaterial mit schwachen Verlusten und niedriger Sintertemperatur, Herstellungsverfahren und magnetische Komponente, die dieses Ferritmaterial enthält

Title (fr)

Matériau ferrite à faibles pertes et à basse température de frittage, procédé de fabrication et composant magnétique comportant ledit matériau ferrite

Publication

**EP 1842837 B1 20111116 (FR)**

Application

**EP 07105068 A 20070328**

Priority

FR 0602998 A 20060405

Abstract (en)

[origin: EP1842837A1] Spinel type ferrite material (I) containing nickel and zinc, is new. Spinel type ferrite material (I) containing nickel and zinc, of formula  $Ni_xMn_yZn_zMg_mCu_wCo(\epsilon)Fe(2-\delta)O_4$  is new.  $x$  : greater than 0 to less than 0.8;  $\delta$  : greater than 0 to  $\leq 0.06$ ;  $\epsilon$  : 0.005-0.1, preferably approximately 0.01-0.02;  $z$  : 0.05-0.6;  $y$  : greater than 0.005 to less than 0.1, preferably approximately 0.01-0.05;  $m$  : greater than 0.005 to less than 0.1; and  $w$  : greater than 0.1 to less than 0.25, preferably approximately 0.15-0.2. Provided that the sum of  $2(x+y+z+m+w+\epsilon)$  and  $3(2-\delta)$  is equal to 8. Independent claims are included for: (1) a composite material comprising (I) and vanadium oxide/bismuth oxide; (2) a magnetic component, comprising a magnetic material of ferrite core (I); (3) power supply decoupling comprising the magnetic component; (4) inductance comprising an assembly of ferrite material layers and co-sintered metal tracks; and (5) multi-layer transformer comprising an assembly of ferrite layers and co-sintered metal tracks.

IPC 8 full level

**C04B 35/26** (2006.01)

CPC (source: EP)

**C04B 35/265** (2013.01); **H01F 1/344** (2013.01); **C04B 2235/3206** (2013.01); **C04B 2235/3239** (2013.01); **C04B 2235/3263** (2013.01); **C04B 2235/3265** (2013.01); **C04B 2235/3277** (2013.01); **C04B 2235/3279** (2013.01); **C04B 2235/3281** (2013.01); **C04B 2235/3284** (2013.01); **C04B 2235/3298** (2013.01); **C04B 2235/77** (2013.01); **H01F 17/04** (2013.01)

Cited by

CN112142458A; FR2952752A1; CN109678481A; WO2011061199A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**EP 1842837 A1 20071010**; **EP 1842837 B1 20111116**; AT E533736 T1 20111215; FR 2899579 A1 20071012; FR 2899579 B1 20080704

DOCDB simple family (application)

**EP 07105068 A 20070328**; AT 07105068 T 20070328; FR 0602998 A 20060405